

REMARKS

Pursuant to the present amendment, claims 1, 10, 14, 22 and 26 have been amended, claims 9, 21 and 27 have been canceled, and new claims 28-34 have been added. Thus, claims 1-8, 10-20, 22-26 and 28-34 are pending in the present application. No new matter has been introduced by way of the present amendment. Reconsideration of the present application is respectfully requested.

In the Office Action, claim 26 was rejected under 35 U.S.C. § 102 as allegedly being anticipated by Nishi (U.S. Patent No. 6,813,000). Claims 1-8, 12-14, 16-20 and 24-25 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Nishi. Applicants respectfully traverse the Examiner's rejection.

In the Office Action, claims 9-11, 15, 21-23 and 27 were indicated to be allowable if rewritten in independent form to include all intervening limitations. Pursuant to the present amendment, independent claims 1, 14 and 26 have been amended to include the limitations from now-canceled dependent claims 9, 21 and 27, respectively. Thus, it is respectfully submitted that claims 1-8, 10-20 and 22-6 are in condition for immediate allowance.

New independent claims 28-30 have been added to re-present allowable dependent claims 11, 15 and 23, respectively, in independent form. Thus, new claims 28-30 are likewise in condition for allowance.

New independent claims 31 and 33 have been added to re-present original dependent claims 6 and 17 in independent form. As described more fully below, new independent claims 31 and 33 are allowable over the prior art of record.

As the Examiner well knows, an anticipating reference by definition must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim.

In re Bond, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). To the extent the Examiner relies on principles of inherency in making the anticipation rejections in the Office Action, inherency requires that the asserted proposition necessarily flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981); *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1463-64 (Bd. Pat. App. & Int. 1990); *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Int. 1987); *In re King*, 231 U.S.P.Q. 136, 138 (Fed. Cir. 1986). It is not enough that a reference could have, should have, or would have been used as the claimed invention. “The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Oelrich*, at 326, quoting *Hansgirg v. Kemmer*, 40 U.S.P.Q. 665, 667 (C.C.P.A. 1939); *In re Rijckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993), quoting *Oelrich*, at 326; see also *Skinner*, at 1789. “Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Skinner*, at 1789, citing *Oelrich*. Where anticipation is found through inherency, the Office’s burden of establishing *prima facie* anticipation includes the burden of providing “...some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Skinner* at 1789.

Moreover, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s

disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to alleged obviousness, there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

Applying these legal standards, it is respectfully submitted that new independent claims 31 and 33 are allowable over the prior art of record. New independent claims 31 and 33 recite that the first variable indicates at least a two-dimensional translatory motion and at least one rotary motion. It is respectfully submitted that at no point does the art of record disclose or suggest the entirety of the invention defined by independent claims 31 and 33.

In rejecting claims 6 and 17, the Examiner cited to Col. 33, ll. 57-60 of Nishi. Office Action, p. 5. Applicants respectfully disagree with this reading of Nishi. The cited passages of Nish are directed to autofocus control (AF) and autoleveling control (AL). The AF control is performed so that the average value of the obtained focus positions is allowed to approach the image plane. The AL control is performed to insure that the angles of inclination are conformed to the image plane. Col. 31, l. 61 – Col. 32, l. 8. Simply put, Nishi is not directed to a method of aligning a substrate that employs at least a two-dimensional translatory motion, *e.g.*, “x” and “y” directions, and at least one rotary motion. As far as translatory movement is concerned, it appears that Nishi is only concerned with a single translatory direction, *e.g.*, vertical positioning such that the average value of the obtained focus positions approaches the image plane. Thus, it is respectfully submitted that Nishi does not anticipate new claims 31 and 33 for at least this reason.

Moreover, it is respectfully submitted that new claims 31-34 are not obvious in view of Nishi. As set forth above, Nishi is simply not directed to an alignment system. There is no suggestion in Nishi to perform the alignment method recited in independent claims 31 and 33 that involves use of at least two-dimensional translatory motion and at least one rotary motion. It is respectfully submitted that any attempt to assert that new claims 31-34 are obvious in view of Nishi necessarily constitutes an improper use of hindsight using Applicants’ disclosure as a roadmap. A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002). Conclusory statements regarding common

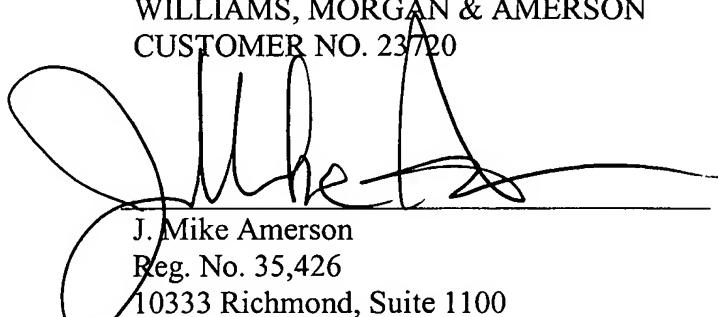
knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

New dependent claims 32 and 34 are likewise believed to be allowable over the prior art of record. These claims recite that the rotary motion is in a plane defined by the at least two-dimensional translatory motion. Support for new dependent claims 32 and 34 can be found in the specification at, for example, page 9, lines 1-18. At no point is the entirety of the inventive method defined by dependent claims 32 and 34 disclosed or suggested in Nishi. Nishi only discusses adjusting the tilt of the surface of the substrate relative to a horizontal plane. At no point does Nishi even remotely suggest rotating the substrate in a plane defined by the two-dimensional translatory motion. It is respectfully submitted that new claims 32 and 34 are allowable.

For the aforementioned reasons, it is respectfully submitted that all pending claims are in condition for immediate allowance. The Examiner is invited to contact the undersigned attorney at (713) 934-4055 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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